

# TARGETS A & B

Name \_\_\_\_\_ Date \_\_\_\_\_

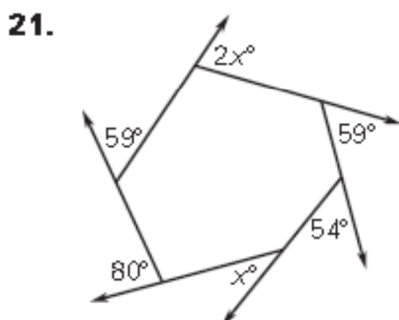
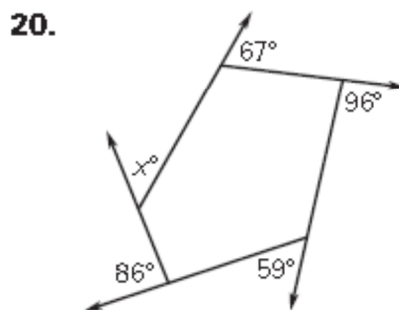
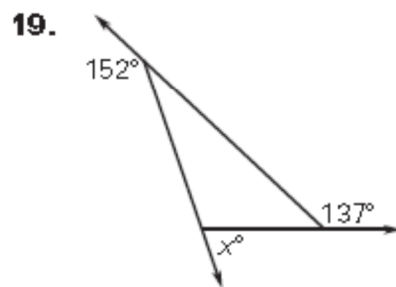
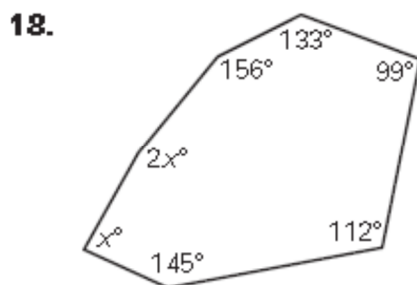
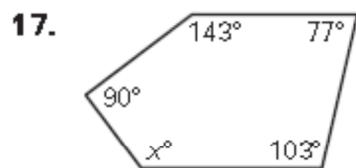
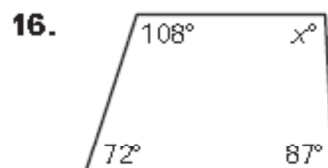
**Find the sum of the measures of the interior angles of the indicated convex polygon.**

- |            |           |           |
|------------|-----------|-----------|
| 1. Decagon | 2. 13-gon | 3. 17-gon |
| 4. 18-gon  | 5. 22-gon | 6. 25-gon |
| 7. 30-gon  | 8. 34-gon | 9. 39-gon |

**The sum of the measures of the interior angles of a convex polygon is given. Classify the polygon by the number of sides.**

- |                  |                  |                  |
|------------------|------------------|------------------|
| 10. $1260^\circ$ | 11. $2160^\circ$ | 12. $3240^\circ$ |
| 13. $4680^\circ$ | 14. $5400^\circ$ | 15. $7560^\circ$ |

**Find the value of  $x$ .**



22. The measures of the interior angles of a convex quadrilateral are  $x^\circ$ ,  $2x^\circ$ ,  $4x^\circ$ , and  $5x^\circ$ . What is the measure of the largest interior angle?
23. The measures of the exterior angles of a convex pentagon are  $2x^\circ$ ,  $4x^\circ$ ,  $6x^\circ$ ,  $8x^\circ$ , and  $10x^\circ$ . What is the measure of the smallest exterior angle?

**Find the measures of an interior angle and an exterior angle of the indicated regular polygon.**

- |                     |                     |                    |
|---------------------|---------------------|--------------------|
| 24. Regular hexagon | 25. Regular decagon | 26. Regular 15-gon |
| 27. Regular 20-gon  | 28. Regular 30-gon  | 29. Regular 36-gon |

## TARGETS A - B ANSWERS

1.  $1440^\circ$
2.  $1980^\circ$
3.  $2700^\circ$
4.  $2880^\circ$
5.  $3600^\circ$
6.  $4140^\circ$
7.  $5040^\circ$
8.  $5760^\circ$
9.  $6660^\circ$
10. 9
11. 14
12. 20
13. 28
14. 32
15. 44
16. 93
17. 127
18. 85
19. 71
20. 52
21. 36
22.  $150^\circ$
23.  $24^\circ$
24.  $120^\circ$ ;  $60^\circ$
25.  $144^\circ$ ;  $36^\circ$
26.  $156^\circ$ ;  $24^\circ$
27.  $162^\circ$ ;  $18^\circ$
28.  $168^\circ$ ;  $12^\circ$
29.  $170^\circ$ ;  $10^\circ$